

592 B106

HUPPUCH

A TRAILS MANAGEMENT
IMPROVEMENT PROGRAM
FOR THE

SOUTHERN REGION

BY
Charles Huppuch
Trails Specialist - Southern Region
USDA - Forest Service

April 1984

Written for:

Recreation Short Course

1982 Session - Clemson University

TABLE OF CONTENTS

I.	INTRODUCTION	
A.	Background	1
B.	Statement of The Problem	4
C.	Purpose	8
D.	Objectives	8
E.	Limitations	9
II.	PROCEDURES	10
	Approach	10
IV.	ANALYSIS OF THE PROBLEM AND MANAGEMENT CONCERNS	14
A.	Analysis of the Problem	14
B.	Management Concerns	18
C.	Analysis of Management Concern (Example)	
	See enclosure - Appendix (page 12-15)	25
V.	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	29
VI.	APPENDIX	33
A.	System Planning For Trails	34
B.	Trail Management Improvement Program	
	5 year Plan (booklet enclosed)	
C.	REFERENCES CITED	37

CHAPTER I

INTRODUCTION

A. BACKGROUND

Trails have played an important role in providing outdoor recreation in the National Forest Southern Region (8) since the early 1930's. They have served a broad spectrum of society from the serious long distance hiker attempting to cover many miles in record time to families on a casual Sunday stroll to even the local farm boy who stalks along a path as he hunts squirrels.

Over 6,600 miles of system trail along with untold miles of old woods roads provide access to 12 million acres of National Forest land suited to dispersed type recreation. Not only do these trails offer a recreation experience in themselves but they also facilitate a variety of other of other recreation opportunities. Such opportunities as hunting, fishing, rock climbing, bird watching, rock hounding, motorcycling, and horseback riding are just a few of the popular activities associated with trails.

The Southern Region encompasses 13 states from Virginia and Kentucky to the South Atlantic and Gulf Coast extending westward to include Texas, Arkansas, and Oklahoma. Trails in the Southern Region are found in more diverse ecosystems than anywhere in the nation. They vary from the sub-tropical jungle vegetation of Puerto Rico and Florida, the swamps and bays of the coastal plains, to the rugged Appalachian Mountains that reach elevations of 6,000 feet.

The character and purpose of these trails is as diverse as the ecosystem they traverse. They vary from the Appalachian National Scenic Trail that follows the crest of the Appalachian Mountains, to motorcycle trails meandering through Texas hill country, to special trails designed for the blind and handicapped. All are a challenge to the manager to provide a satisfying experience for the recreationist and at the same time produce products from other resources that often conflict.

Emphasis on recreation trails has increased dramatically since the mid-1950's when recreation was recognized as one of the important multiple uses of National Forests. Expansion of the Region's trails reached its high point during a period from 1970 to 1981 when over 1,200 miles of trail were constructed and added to the system. A growing national interest in hiking along with the National Trails Systems Act (1968) provided the emphasis. An assortment of manpower programs designed to put people to work provided the labor. Such programs as the Youth Conservation Corps (YCC) and Young Adult Conservation Corps (YACC) are credited with constructing a variety of trails during this period. Most trails were well planned and designed while others primarily provided work projects with little understanding of their need or purpose.

Trail related recreation has increased dramatically over the last 10 years, although there are signs of it leveling off. Recreation Information Management (RIM) estimates for the years 1980-1983 reflect this trend.

REGION 8 RIM

TRAIL RECREATION USE

Visitor Days (M)

<u>SITE</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
Trails	1314	1348	1261	1548

ACTIVITY

Motorcycle & Scooter	724	741	758	753
Ice & Snow Craft	5	6	8	8
Hiking & Walking	1746	1757	1730	1815
Horseback	375	392	357	455
Cross Country Skiing	1	2	13	12

Cordell and Hende (1980) predict future growth up to the year 2030 in hiking as well as other forms of dispersed recreation that trails serve. While these predictions were made for the Nation, they are also expected to come true for the South. This prediction is partially based on the fact that the South is a leading growth region in population.

Trail managers need to understand the role of trails in the management of dispersed recreation along with its implications. They should be aware of the present "state of the art" in managing trails and where we need improvement to meet the future. This paper will explore some of their concerns and recommend ways of improvement. The statement of the problem, and the purpose and objective of this paper are discussed in this chapter.

B. STATEMENT OF THE PROBLEM

1. The planning and management of the trails program in Region 8 Forests lacks clear program direction and emphasis to carryout its role in recreation.

Only general guides or direction statements are available to the manager. These are inadequate for detail planning and managing a cohesive Forest trail program capable of meeting the needs of trail users of today and for the future. Some of these direction statements are as follows:

Forest Service Manual (FSM 2302) Objectives:

-- Increase the supply of outdoor recreation opportunities and services through programs which emphasize dispersed recreation while accommodating its current share of developed site recreation.

Forest Service Manual (2303.2) Land Planning and Management

-- Maintain full spectrum of trail uses, ranging from opportunities for adventure and challenge to opportunities for the handicapped.

- Evaluate recreation values of existing and potential trails in land management planning and program implementation to ensure these values are not inadvertently lost.

These objectives yet are useful in developing a framework for a Regional trail program, yet they do not go far enough. Current direction does not recognize trails as an important way of increasing access and providing a wide variety of dispersed recreation opportunities.

Forest Service Manual (FSM 2353.02) Objectives:

- Provide trail-related recreation opportunities that serve public needs and meet land management and recreation policy objectives.
- Provide trail recreation opportunities that emphasize the natural setting of the National Forest and are consistent with land capability.
- Provide trail access for National Forest management and protection.

While these objectives recognize that trails by themselves offer the recreationist a wide spectrum of experiences, it should be acknowledged that they must be planned and maintained. It is important that this be understood and incorporated into all Region 8 forest land management plans to the best of their capabilities.

2. In addition to the lack of direction, other management concerns surfaced during the "review" process. These concerns highlighted problems that need understanding and constructive action if the Southern Region's trail program is to move ahead in a coordinated and effective manner.

The management problems and concerns dealing with trails and dispersed recreation are identified and consolidated into the following major headings:

1. THE OVERALL TRAIL PROGRAM LACKS ADEQUATE DIRECTION AND COMMON UNDERSTANDING BY PLANNERS AND MANAGERS AND THE PRIORITY IS USUALLY LOW.

2. DETAILED PLANNING FOR TRAILS AND DISPERSED RECREATION WILL BE INSUFFICIENT IN THE FOREST LAND MANAGEMENT PLANS TO PROVIDE ON-THE-GROUND ACTION PROGRAMS TO MEET FUTURE RECREATION NEEDS.

3. THE CONDITION OF THE REGION'S PRESENT TRAIL SYSTEM IS DETERIORATING AS A RESULT OF INSUFFICIENT MAINTENANCE. CERTAIN TRAIL USERS ARE NOT BEING SERVED BY THE PRESENT SYSTEM AND SHOULD BE.

4. THE DEMAND FOR SOME TYPES OF TRAILS AND DISPERSED RECREATION IS INCREASING WHILE BUDGETS FOR MANAGEMENT ARE DECREASING.

5. THERE IS A NEED TO IMPROVE RECREATION MANAGER'S SKILLS AND TECHNIQUES FOR MANAGING THE TRAIL PROGRAM.
6. THE CURRENT TRAIL INVENTORY SYSTEM (TIS) NEEDS IMPROVING AND KEPT CURRENT TO MEET NEEDS AT ALL MANAGEMENT LEVELS.
7. THE VOLUNTEER PROGRAM IS NOT BEING FULLY UTILIZED TO SUPPLEMENT THE TRAIL PROGRAM.
8. INFORMATION GIVEN THE VISITORS CONCERNING TRAILS AND DISPERSED RECREATION OPPORTUNITIES LACKS UNDERSTANDING OF USER NEEDS, APPROPRIATE DIRECTION, AND IMPLEMENTATION STRATEGIES.
9. THERE IS A NEED TO BETTER MANAGE RECREATION TRAIL USERS FOR THEIR ENJOYMENT AND PROTECTION OF THE RESOURCE.
10. THERE IS A NEED TO STRENGTHEN OUR INVOLVEMENT AND COORDINATION WITH NATIONAL AND STATE AGENCIES DEALING IN RECREATION AS WELL AS TRAIL ASSOCIATIONS.

C. PURPOSE

The purpose of this project study is to provide the basis and background for a five year trail action plan that will strengthen and guide the management of the Southern Region's Trail Program. The study will identify Regional concerns and situations that presently impede the trail program. It will recommend goals and objectives to guide and improve the program along with action items to be implemented over a five year period to achieve these objectives.

The action plan will provide Regional direction and guidelines to involve Forest Supervisors, District Rangers, and Recreation Staff in carrying out a strong trail program for the public benefit.

D. OBJECTIVES

1. To identify problems and concerns currently impeding the trail program in Region 8.
2. Identify opportunities and recommend actions that will strengthen the trail program in the Region and individual forests. Outline techniques for improvement and how they might be implemented.
3. Recommend improvements in providing trail and dispersed recreation information in Forest land management plans.

E. LIMITATIONS

1. This study is a general overall view of the Region's trail program. Individual Forests and Districts are at different levels of planning and quality management of their program. Therefore, some concerns and situations may not apply uniformly to all Forests.
2. The concerns, problems, and opportunities for the trail program were drawn from many sources. They represent different perspectives, prejudices and values. There was not enough time to test the validity of their input in depth.
3. A Forest by Forest review of individual trail management situations and "state-of-the-art" was not possible. Field reviews were done on seven Forests out of fifteen.

SUMMARY...With these limitations there is sufficient evidence and agreement among recreation managers that uniform management direction is lacking.

CHAPTER II

PROCEDURES

APPROACH

A. The supposition that there are major problems impeding the Region's trail program was analyzed.

Statement of the Problem - The planning and management of trails and dispersed recreation in Region 8 lacks clear program direction and emphasis to carryout its role in outdoor recreation.

To determine if this supposition is true, available direction statements were searched and reviewed for applicability.

1. National Direction

A review was made from the following documents:

- Forest Service Manuals
 - 1900 Planning
 - 2302 Objectives
 - 2303 Land Planning
 - 2350 General Forest Environment
 - 7700 Engineering

- National Renewable Resources Planning Act (RPA) of 1974 - 1980
Assessment and Program
- National Forest Management Act of 1976 (NFMA)

2. Regional Direction

A review was made of the following documents:

- Regional Guide - Southern Region, 1983 Issues, Concerns, Guidelines, and Standards.
- Regional Planning for the South, Analysis of the Management Situation
- Forest Service Manual Supplements for Region 8

The direction statements applicable to the Regional trail program were extracted and categorically displayed. Each statement is briefly discussed as to its role in providing overall direction. An evaluation was then made and discussed where this leaves Region 8 managers regarding planning and management of trails.

B. The second phase was to analyze trail management concerns expressed by the staff and managers of each National Forest in Region 8. These concerns were in response to a September 17, 1982, Region 8 memo that asked each Supervisor of the fifteen National Forests to list and explain their concerns relating to the management of their trail program. They were also asked to point out opportunities and recommend ways of improving their programs.

Twelve of the Forests responded in varying degrees of detail. Some added concerns from the District level and combined them with those of the Supervisor's Staff. Others provided only those concerns generated by the Supervisor's Staff based upon their knowledge and experience with the situation in the field.

Responses from the Forests were categorized into major groupings of concern. A Regional team made up of seven individuals with experience in planning, dispersed recreation, river management, and engineering reviewed the Forest concerns. Each concern was evaluated as to its Regional applicability and importance. The team, identified additional management concerns they felt were important. All concerns were summarized and listed by priority into 10 major headings followed by related concerns.

The findings from this paper were summarized and incorporated into a draft Region 8 Trail Management Improvement Program (5-Year Action Plan). The concept of the improvement program was then introduced at the 1983 Recreation Staff Officers Meeting, where Recreation Staff Officers from all Forests in the Region attended. They responded to the draft in an open forum discussion. Each Forest was given additional time to respond to the draft plan before the final was produced.

Treatment of Data

The major concerns provided the basis for identifying problems associated with planning and managing the Regional trail program. The Regional team also examined opportunities for solving problems through uniform direction.

Each concern is discussed as to its role in the overall program. Selected literature was reviewed and pertinent points that related to the concerns or offered solutions were noted.

Finally a recommended action was offered in response to each concern. An example of this process can be found in Appendix A.

The results of this paper has been summarized and condensed into a five year action plan that will guide Region 8 toward an improved trail program in the coming years (See Appendix B).

CHAPTER IV

ANALYSIS OF THE PROBLEM AND MANAGEMENT CONCERNS

Problems that impede the management and planning of trails in Region 8 will be analyzed in this chapter. Present management directions will be reviewed along with concerns for the program. Recommendations for change and improvement will be offered.

A. ANALYSIS OF THE PROBLEM

-- The management and planning of trails in the Southern Region Forests lacks clear program direction as to its role in recreation.

Existing direction statements that now guide the manager can be found in various sources. These statements are listed along with the author's comments on their importance.

1. Recreation Objectives - Forest Service Manual (2302)

Increase the supply of outdoor recreation opportunities and services through programs which emphasize dispersed recreation while accommodating its current share of developed site recreation.

-- This is a key objective. It provides the main ingredient in building our trail program. It addresses an important issue that the public has raised during land management planning public involvement sessions. The public stated that the National Forest chief objective should to be provide outdoor recreation opportunities for dispersed and more primitive recreation. Increasing numbers of Forest visitors are looking for primitive type recreation opportunities and the Forest Service will manage the settings for these opportunities.

A transportation system composed of trails and roads designed to access these settings, will drive the planning and management of the trails program.

Foster the spirit of volunteerism by providing opportunities for service in recreation programs.

-- This direction is timely and essential in carrying out the maintenance and administration of our trails program. Further, it involves the public in meaningful ways that support the program. Implementing the direction will require a better understanding of the value of the volunteer; more experience working with volunteer organizations, and a better means of sharing experiences among Forests.

Maintain full spectrum of trail uses, ranging from opportunities for adventure and challenge to opportunities for the handicapped. Land Planning and Management (FSM 2303.2)

-- This direction gives the Forests the flexibility to determine what trail uses, their location, and number are best suited for the needs of the Forest. Presently the Region is managing a wide spectrum of trail uses but the needs of some users is either not understood or neglected. Little attention has been given to specific trail opportunities and their locations.

Evaluate recreation values of existing and potential trails in land management planning and program implementation to ensure these values are not inadvertently lost. (FSM 2303.2)

-- This is important and timely direction as Forest land management plans are currently being prepared. Unfortunately, draft plans prepared to date have not considered this direction nor has there been Regional guidance for such implementation. This should be done as part of the transportation analysis and in future detailed action plans.

The Regional Guide for the Southern Region provides the following standards useful to the trails program:

FOREST ROADS

- In the Forest plan, National Forests will determine and display a desirable road class distribution classified by a network-wide analysis. Planned construction of new and reconstruction of existing roads will be completed with consideration of the desired road class distribution.
- Management and Use of Access - Forest Supervisors will use all available authorities for control of access and use, while favoring access to the maximum number of compatible forest resources and emphasizing increased use of existing transportation facilities over development of new facilities.

These standards are essential in planning for the access on Forest lands used for dispersed recreation. However, they do not recognize the importance of a system of trails in providing access that also needs a carefully planned distribution to meet recreation and other resource objectives.

RECREATION

- Supply and Demand Coordination - National Forests will seek cooperative relations with other federal and state agencies and the private sector to coordinate supply and demand estimates of outdoor recreation opportunities in the South.
- Supply Determination - Forest Supervisors will employ the Recreation Opportunity Spectrum (ROS) to determine the supply of recreational opportunities on National Forests. Such an assessment will help identify the need for future change in type of recreation experience including a variety of trail experiences.

-- Appalachian Trail - Forest Supervisors will manage the Appalachian Trail (A/T) in cooperation with the Appalachian Trail Conference and the National Park Service based on joint Eastern/Southern Region Appalachian Trail Direction Statement and the Appalachian National Scenic Trail Comprehensive Plan.

All three standards are specific and important for planning and implementing a comprehensive Regional trail program.

B. MANAGEMENT CONCERNS

1. TRAIL PROGRAM DIRECTION

A. The trail program lacks direction and priority is usually low
-- emphasis varies by Forest.

-- staff responsible for trails varies by Forests
Engineering is responsible on two Forests and
Recreation on the others.

-- Forest Supervisors and Staff lack understanding of the
benefits of a strong trail program.

B. Lack of Regional goals for trail program.

C. There is a lack of enthusiasm to create and manage a strong
trail program.

2. SYSTEM PLANNING FOR TRAILS

- A. Lack of process or guidelines for detailed planning of dispersed recreation areas under the direction of the Forest land management plan.
- B. No process for planning an encompassing trail system within dispersed areas under the direction of the Forest land management plan.
- C. ROS concepts are not understood by other land management disciplines and are not understood or supported by line management.
- D. Transportation planning often ignores trails.
Closed timber roads may have recreational opportunities unrecognized and unmanaged. Appropriate closed roads may be incorporated into the trail system for horses, hikers, motor cycles, and snowmobiles.
- E. Inadequate understanding and analysis of present use and future demand.
 - Good data lacking or poorly displayed.
 - Economical means of sampling not being used.
 - Methods of sampling and projecting needs are available but not in the managers hands in a useable form.
 - Lack of incentive for gathering data.
 - No Regional goals for monitoring and setting demand analysis.
 - No guidelines for establishing trail demand and supply and translating them into action plans.

F. Lack of guidelines for planning a trail system within existing and proposed wilderness.

G. ROS is thought of as a planning concept and is not generally being used in management on-the-ground.

3. TRAIL DESIGN AND CONDITION

A. Present trail system conditions are not meeting all peoples' needs.

- Lack of trails to meet certain appropriate user experiences
- Lack of understanding of what trails can be used by different user combinations (Includes closed roads)
- Inadequate trail maintenance management
- Lack of closed trail loops of different lengths for different user types
- Many trails are not being used to the capacity that managers perceive as reasonable numbers. Light use may be good for the primitive range of ROS. Need clearer picture of what people want in hiking experience and what they will use. Need criteria for setting reasonable use levels by ROS classes.
- Some trails are poorly located from both engineering and a hiker experience standpoint.
- Some trails lack proper location because of ownership patterns.

B. Trail design lacks:

- Process for analyzing its total needs and purpose
- Types of users and experience provided
- Selecting standards to meet the trail's requirements
- Criteria for different handicapped needs
- Existing trail standards often misunderstood, ignored or wrong standards used
- Old trails were not built to standard and are now deteriorating and costly to maintain
- Lack of sufficient and safe trailheads
- Bridges tend to be overdesigned and not linked to experience levels

4. TRAIL FUNDING

- A. Trail management is considered low priority on most Forests for constrained dollars in the budget process.
- B. Normal appropriated maintenance funding is below minimum to do required work.
- C. Both trail construction and maintenance programs tend to be funded politically to create jobs during periods of high unemployment. This creates sporadic interest and higher priority, but not efficiently handled on a "crash" basis.
- D. Appropriated trail construction funds are allocated to completing existing trails under construction or improving/unsafe conditions. There is little opportunity to construct new priority trails.

5. TRAINING

- A. Lack of skilled trail people to train the work force in construction, maintenance and management techniques.
- B. Lack of methods, techniques and skills to train managers and technicians in trail location, construction, maintenance and administration.
- C. There is no inventory of skilled trails personnel.

D. Certification of engineers for trails work is not well understood.

How many are certified? How are they used when certified?

E. Necessary skills needed for a trails technician not defined.

6. TRAIL INVENTORY SYSTEM

Trail Inventory System (TIS) needs perfecting and kept current. Need to correspond with Recreation Opportunity Spectrum (ROS) management objectives.

-- System needs to be designed to help on the ground managers but provide necessary data for WO, Regional and Forest use.

7. VOLUNTEER PROGRAM

The volunteer program is not fully coordinated and utilized.

-- There is a lack of understanding of what volunteers can do as well as their limitations.

-- Lack of funding and time to manage the program.

-- Need to share experiences and build on good results.

-- Lack of experience, how to organize, recruit, train, and operate a successful volunteer trail program. A lot can be drawn from experience with the Appalachian National Scenic Trail.

--There may be a need to develop an Adopt-A-Trail program regionwide.

8. INFORMING THE VISITOR ABOUT TRAILS & DISPERSED RECREATION OPPORTUNITIES

- A. Lack of guidelines as to the types of maps, brochures, and information needed for trail users.
- B. Lack of a control system for evaluating public response and demand for certain trail maps and information now available.
- C. Lack of a coordinated effort and ways to disseminate information.
- D. Barriers exist that make the dissemination of information inefficient.
- E. Recreation Opportunity Guide (ROG) benefits are not well understood in this Region and only a few Forests and Districts use it. There has been no strong Regional direction to use this system.
- F. Opportunities need to be explored for the private sector to provide maps and select information.

G. Available standards for making wilderness and dispersed area maps need to be understood and used regionwide.

9. COORDINATION WITH OUTSIDE AGENCIES & PRIVATE ASSOCIATIONS

There is a need to strengthen our involvement and coordination with national and state agencies and trail associations.

10. MANAGING THE VISITOR

A. There is a need to better establish capacities and control of visitor use.

--Need better monitoring and analysis of use.

B. There is a need to provide adequate and appropriate facilities where needed for user convenience and safety.

-- Need to provide guidelines and design criteria for trail facilities.

C. Analysis of Management Concern Type from pages 11-14 from attached Appendix.

APPENDIX A

R-8 TRAIL MANAGEMENT ISSUES, CONCERNS AND OPPORTUNITIES

1. TRAIL PROGRAM DIRECTION

- A. Trail program lacks direction, and priority is usually low--
 - emphasis varies by Forest.
 - responsibility for trails varies by Forests or is splintered.
 - Forest Supervisors and Staff lack understanding of the benefits of a strong trail program.
- B. Lack of Regional goals for trail program.
- C. Enthusiasm needs to be built and kept up from the ground level.

2. SYSTEM PLANNING FOR TRAILS

- A. Lack of process or guidelines for detailed planning of dispersed recreation areas under the direction of the Forest Land Management Plan.
- B. No trail planning system in Forest land management plans.
- C. ROS concepts are not understood by other land management disciplines and are not understood or supported by line management.
- D. Transportation planning often ignores trails. Closed timber roads may have recreational opportunities unrecognized and unmanaged.
- E. Inadequate understanding and analysis of present use and future demand.
 - Good data lacking or poorly displayed.
 - Economical means of sampling not being used.
 - Methods of sampling and projecting needs are available but not in the managers hands in a useable form.
 - Lack of incentive for gathering data.
 - No Regional goals for monitoring and setting demand analysis.
 - No guidelines for establishing trail demand and supply and translating them into action plans.
- F. Lack of guidelines for planning a trail system within existing and proposed wilderness.
- G. ROS is thought of as a planning concept and is not being used in management on-the-ground.

3. TRAIL DESIGN AND CONDITION

A. Present trail system conditions are not meeting all peoples' needs.

- Lack of trails to meet certain user experiences.
- Lack understanding of what trails can be used by different user groups (includes closed roads).
- Inadequate trail maintenance management.
- Lack of closed trail loops of different lengths for different user types.
- Many trails are not being used to perceived management capacity. Need clearer picture of what people want in hiking experience and what they will use. Need criteria for setting reasonable use levels by ROS classes.
- Some trails are poorly located from both engineering and a hiker experience standpoint.
- Some trails lack proper layout because of ownership patterns.
- The condition of the Region's present trail system is deteriorating as a result of poor maintenance and lack of use. Many trail users are not being served by the present system.

B. Trail design lacks:

- process for analyzing its total needs and purpose.
- types of users and experience provided.
- selecting standards to meet the trail requirements.
- criteria for different handicapped needs.
- existing trail standards often misunderstood, ignored or wrong standards used.
- some old trails were not built to standard and are now deteriorating and costly to maintain.
- sufficient and safe trailheads (need design criteria).
- bridges tend to be overdesigned and not linked to experience levels (need design criteria to fit experience level).

4. TRAIL FUNDING

A. Trail management is considered low priority on most Forests for constrained dollars in the budget process.

B. Normal appropriated maintenance funding is below minimum to do required work.

C. Both trail construction and maintenance programs tends to be funded politically to create jobs during periods of high unemployment. This creates sporadic interest and raises the priority, but it is not efficiently handled on a "crash" basis.

D. Appropriated trail construction funds are allocated to complete existing trails under construction or improving/unsafe conditions. There is little opportunity to construct new priority trails.

5. TRAINING

- A. Lack of skilled trail people to train the work force in trail construction, maintenance and management techniques.
- B. Lack of methods, techniques and skills to train managers and technicians in trail location, construction, maintenance and administration.
- C. No inventory of skilled trails personnel.
- D. The role of engineers certified for trails work is not well understood. How many are certified? How are they used when certified?
- E. Necessary skills needed for a trails technician not defined.

6. TRAIL INVENTORY SYSTEM

Trail Inventory System (TIS) needs improvement and kept current. Need to correspond with Recreation Opportunity Spectrum (ROS) management objectives.

--System needs to be designed to help managers but provide necessary data for WO, Regional and Forest use.

7. VOLUNTEER PROGRAM

The volunteer program is not fully coordinated and utilized.

--There is a lack of understanding of what volunteers can and can't do for trails.

--Lack of funding and time to manage the program.

--Need to share experiences and build on good results.

--Lack of experience, how to organize, recruit, train, and operate a successful volunteer trail program. A lot can be drawn from sharing experiences with Appalachian Trail Managers.

--There may be a need to develop an Adopt-A-Trail program region-wide.

8. VISITOR INFORMATION PROGRAMS ABOUT TRAILS AND DISPERSED RECREATION OPPORTUNITIES SHOW A LACK OF UNDERSTANDING AND UNIFORM DIRECTION.

- A. Lack of guidelines as to the types of maps, brochures, and information needed for trail users.
- B. Lack of a control system for evaluating public response and demand for certain trail maps and information now available.

- C. Lack of a coordinated effort and ways to disseminate information.
- D. Barriers exist that make the dissemination of information inefficient.
- E. Recreation Opportunity Guide (ROG) benefits are not well understood in this Region and only a few Forests and Districts use it. There has been no strong Regional direction to use this system.
- F. Opportunities need to be explored for the private sector to provide maps and select information.
- G. Standards for making wilderness and dispersed area maps need to be developed and used region-wide.

9. COORDINATION WITH OUTSIDE AGENCIES AND PRIVATE ASSOCIATIONS

There is a need to strengthen our involvement and coordination with national and state agencies and trail associations.

10. MANAGING THE VISITOR

- A. There is a need to better establish capacities and control of visitors use.
 - Need better monitoring and analysis of use.
 - Based upon use analysis, develop clear standards that provide managers with contingency measures to be used when:
 - Level of acceptable change of the environment exceed standards.
 - Quality of experience deteriorates below acceptable levels.
- B. There is a need to provide adequate and appropriate facilities where needed for user convenience and safety.
 - Need to provide guidelines and design criteria for trail facilities.

CHAPTER V
SUMMARY AND CONCLUSIONS

A. SUMMARY

Over 6,000 miles of system trail play an important role in providing outdoor recreation in the National Forest Southern Region. They serve a broad spectrum of users who enjoy the trail experience in itself or use trails as a means of access to the land to carry out a variety of outdoor experiences. Yet management and planning of trails throughout the Region lacks clear program direction as to its role in recreation and how that role will be carried out. Managers feel they could be doing a better job, but first we need to know:

- How are we doing it now?
- What do we need to be doing to manage an effective trail program?

The purpose of this study was to identify and analyze Regional concerns and situations that presently impede the trail program. Recommendations were made that will provide the basis for clear program direction in trail and dispersed recreation management. These concerns and recommendations have been translated into goals and objectives for a Trail Management Improvement Program - 5 Year Action Plan (Appendix B).

To determine present trail concerns and how the Region is operating, all Forests were asked to give a written response. Seven Forests were visted to review on the ground conditions. A Regional staff team reviewed the Forest responses and added concerns from a Regional viewpoint. The results identified 10 major concerns with many related facets. These form the basis of the problem that will be improved by carrying out the 5 year action plan.

B. CONCLUSIONS

Based upon the findings and within the limitations of this study the Regional trail program lacks clear direction although most of the existing National and Regional direction is current and pertinent. The direction does not go far enough and it is disjointed. Comprehensive direction needs to be produced under one section of the manual that will provide the general program objectives and direction to manage the trail program for the future. Present drafts of Forest land management plans come woefully short of providing this program direction.

The findings further concluded that there were at least 10 major concerns identified that need to be considered for improvement. They are:

1. THE OVERALL TRAIL PROGRAM LACKS ADEQUATE DIRECTION AND COMMON UNDERSTANDING BY PLANNERS AND MANAGERS AND THE PRIORITY IS USUALLY LOW.

2. DETAILED PLANNING FOR TRAILS AND DISPERSED RECREATION WILL BE INSUFFICIENT IN THE FOREST LAND MANAGEMENT PLANS TO PROVIDE ON-THE-GROUND ACTION PROGRAMS TO MEET FUTURE RECREATION NEEDS.
3. THE CONDITION OF THE REGION'S PRESENT TRAIL SYSTEM IS DETERIORATING AS A RESULT OF INSUFFICIENT MAINTENANCE OR THE LACK OF USE BY THE PUBLIC. CERTAIN TRAIL USERS ARE NOT BEING SERVED BY THE PRESENT SYSTEM.
4. THE DEMAND FOR SOME TYPES OF TRAILS AND DISPERSED RECREATION IS INCREASING WHILE BUDGETS FOR MANAGEMENT ARE DECREASING.
5. THERE IS A NEED TO IMPROVE SKILLS AND TECHNIQUES FOR MANAGING THE TRAIL PROGRAM.
6. THE CURRENT TRAIL INVENTORY SYSTEM (TIS) NEEDS IMPROVING AND KEPT CURRENT TO MEET NEEDS AT ALL MANAGEMENT LEVELS.
7. THE VOLUNTEER PROGRAM IS NOT BEING FULLY UTILIZED TO SUPPLEMENT THE TRAIL PROGRAM.
8. INFORMATION GIVEN THE VISITORS CONCERNING TRAILS AND DISPERSED RECREATION OPPORTUNITIES LACKS UNDERSTANDING OF USER NEEDS, APPROPRIATE DIRECTION, AND IMPLEMENTATION STRATEGIES.

9. THERE IS A NEED TO BETTER MANAGE RECREATION TRAIL USERS FOR THEIR ENJOYMENT AND PROTECTION OF THE RESOURCE.
10. THERE IS A NEED TO STRENGTHEN OUR INVOLVEMENT AND COORDINATION WITH NATIONAL AND STATE AGENCIES DEALING IN RECREATION AS WELL AS TRAIL ASSOCIATIONS.

C. RECOMMENDATIONS

1. Set clear direction and responsibilities for the Southern Region's Trail Program in the form of a Region-8 manual supplement.
2. Set clear guidelines and policy for planning and managing the trail program in the Region-8 manual supplement.
3. Provide a process with guidelines for detailed planning of dispersed recreation areas as part of the Forest land management plan.
4. Carry out the detailed recommendations found in the Trail Management Improvement Program - 5 Year Action Plan (Appendix B). Experience and information drawn from implementing this plan should be valuable in carrying out recommendations numbers 2 and 3.

A P P E N D I X

APPENDIX A

SYSTEM PLANNING FOR TRAILS

CONCERN: INADEQUATE UNDERSTANDING AND ANALYSIS OF PRESENT USE AND FUTURE DEMAND

- Good data lacking or poorly displayed.
- Economical means of sampling not being used.
- Methods of sampling and projecting needs are available but not in the manager's hands in a usable form.
- Lack of incentive for gathering data.
- No Regional goals for monitoring and setting demand analysis.
- No guidelines for establishing trail demand and supply and translating them into action plans.

Situation - The Forests in Region 8 generally do not have sound data to measure current use on trails and dispersed areas - what trails the hiker prefers, length of stay, days of week, and season of use is lacking. Use estimates for RIM reporting is normally based upon simple field observations, comparisons, or estimates by field personnel. There are exceptions. Some trails have been closely studied using statistical sampling procedures for more reliable results.

The lack of reliable use data for dispersed recreation has forced Forest plans to base present use and future demand on questionable data. These plans may grossly under or over estimate future needs and actions recommended.

Recent Regional direction has encouraged gathering more reliable use data on select trails to provide baseline data. Some specific studies have been identified and financed. This direction has not been strong, and funding is extremely limited to carry it out.

Literature Cited - Large numbers of research or study papers are available on determining use on trails and dispersed areas. Those especially helpful to R8 needs are offered.

MANAGEMENT GUIDELINES FOR MONITORING USE ON BACKCOUNTRY TRAILS, Lenord, Echelberger, Plumley and Van Meter, FS Research Note 286. 1980 Northeastern Forest Experiment Station.

This paper impresses upon the manager the importance of knowing backcountry use patterns and questions that should be asked before starting a use-monitoring program. It provides six techniques for monitoring that were tested in the Northeast. Types of equipment are recommended along with maintenance requirements. It should be evaluated before any studies are begun.

VISITOR USER TREND FOR THE CHEOAH RANGER DISTRICT NATIONAL FORESTS IN N.C., by James E. Brown, 1981. Outdoor Recreation Short Course, Utah State University.

This paper analyzes the results of a recreation user study carried out on the District between June and October 1981, using participant observation and conversation, developed fee site envelopes, trail counters and registers. The study gives a profile of different types of recreation users on the District and suggests ways they can be managed. A list of 14 recommendations were made to alter, improve, or initiate the existing management practices.

This study is particularly important because it was done by the responsible manager and he states the importance of understanding user characteristics and needs in order to manage a District recreation program.

APPALACHIAN TRAIL HIKER STUDY - CHEOAH RANGER DISTRICT, NANAHALA FOREST IN N.C., Van Meter, 1983 Unpublished by Appalachian Trail Conference.

This study was done between May and October 1982, to determine the baseline use of a segment of the A/T (Cheoah and Wayah Ranger Districts). The study was unusually successful in counting trail hikers and determining their characteristics by registration cards and pressure counters. A/T Club Volunteers provided many hours of time to validate the reliability of the cards.

The study with its proven method, can be used in comparable situations throughout Region 8. It can provide accurate baseline data for the more important trails. The results might be used to expand use estimates for trails with similar characteristics.

PROCESS RECORD FOR THE SUPPLY AND DEMAND ANALYSIS FOR DISPERSED RECREATION OPPORTUNITIES ON THE SUMTER NATIONAL FOREST - Ronald W. Lindenboom, May 1982.

This paper provides detailed projection of dispersed recreation supply and demand along with estimated carrying capacities of the Forest to supply this demand. It is based upon past RIM data.

This process based upon reliable use data, can provide managers with an inventory of opportunities by ROS class and estimate the capacities of people that can be served for certain experience levels. The process is an example that other Forests should consider as they address the need for detailed supply and demand estimates.

Conclusions - Managers must understand the characteristics and patterns of current use. To formulate realistic direction they will need to establish present baseline data that is accurate and estimate current use and future demand. They will need to evaluate potential demand for opportunities not now offered and determine if they can or should be made available.

The importance of gathering accurate user data to predict present and future use should be emphasized in the planning process. Regional and Forest direction should provide for annual accomplishments toward this goal.

Economical methods of gathering user information are now available and have been tested in this Region. Managers should be made aware of those methods and how they can be molded to their situation.

Recommendations

1. Articulate the importance of gathering, analyzing, and monitoring dispersed recreation use data in the planning process. Develop guidelines showing how data can predict supply and demand. Incorporate in handbook supplement.
2. Provide Forests with guidelines for carrying out a trail use monitoring program using successful methods. Incorporate these guides into a "Trails South" handbook.
3. Distribute the study, Visitor User Trend for the Cheoah Ranger District to all Districts in Region 8 to reinforce the importance of monitoring and managing recreation use.
4. Set Forest goals to begin baseline monitoring use on selected trails on a planned basis.
5. Encourage "technology transfer" by Forests and Districts sharing experiences that carry out monitoring techniques.

APPENDIX C

REFERENCES CITED

Renewable Resources Recreation in the United States: Supply, Demand, and Critical Policy Issues,

by H. Ken Cordell and John C. Hendee, prepared for the National Conference on Renewable Natural Resources, sponsored by American Forestry Association, August, 1982.

Trails South - A Guide Dealing With Forest Trails In The Southern Region,
U.S.D.A.

U.S. Forest Service, Southern Region, Atlanta, 1982.

Management Guidelines For Monitoring Use On Backcountry Trails,

Leonard, Echelberger, Plumley and Van Meter, F.S. Research Note 286. 1980
Northeastern Forest Experiment Station.

Visitor User Trend For The Cheoah Ranger District National Forests In N.C.,

James E. Brown, 1981 Outdoor Recreation Short Course, Utah State University.

Appalachian Trail Hiker Study - Cheoah Ranger District, Mantaha Forest In N.C.,

Van Meter, 1983, Unpublished paper by the Appalachian Trail Conference.

Process Record For The Supply And Demand Analysis For Dispersed Recreation Opportunities On The Sumter National Forest,

Ronald W. Lindenboom, May 1982, U.S. Forest Service, Columbia S.C.

DOCUMENT HEADER

Document name: 2350 CDH 3/90 0722 Document type: WRD

Drawer: !DISP-WILD-INFO-CORRES Folder: DRAFT
Received from: CEO_ESX

Last modified on Mar 23, 90 8:05 AM by M.GRICE

Author: C.HUPPUCH Typist: M.ABNA/MEG

Filed on: Aug 09, 88 10:43 AM Message attached

Subject: 2350 TRAILS MANAGEMENT IMPROVEMENT PROGRAM APRIL 1984 - CLEMSON

Summary:

WRITTEN FOR: RECREATION SHORT COURSE, 1982 SESSION - CLEMSON
UNIVERSITY

Comments:

Gina McLellan 13/23/90
Clemson University *Harding Key*

Keywords:

2350 MARCH
TRAILS MANAGEMENT
PROGRAM APRIL
CLEMSON

RN
IMPROVEMENT
1984